

Claims

- [c1] 7. In a telecommunications network comprising a program service provider connected to a plurality of program content provider, a method of performing program-on-demand from a Session Initiation Protocol (SIP) terminal, the method comprising the steps of:
- a) sending a program request to the service provider, the program request comprising a program list including a plurality of selected programs;
 - b) responsive to a receipt of the program request, determining in the service provider a content provider storing a first program (P1) from the plurality of selected programs;
 - c) the service provider establishing a first SIP session between the SIP terminal and the content provider storing the first program P1; and
 - d) streaming from the content provider storing the first program P1 to the SIP terminal the first program P1 over the first SIP session.
- [c2] 2. The method claimed in claim 1, further comprising the steps of:
- e) releasing the first SIP session between the SIP terminal and the content provider storing the first program P1;
 - f) following the release of the first SIP session, determining in the service provider a content provider storing a second program (P2) from the plurality of selected programs;
 - g) the service provider establishing a second SIP session between the SIP terminal and the content provider storing the second program P2; and h) streaming from the content provider storing the second program P2 to the SIP terminal the second program P2 over the second SIP session.
- [c3] 3. The method claimed in claim 1, wherein step c) comprises the steps of:
- i) sending a first INVITE message from the service provider to the SIP terminal for establishing a first leg of the first SIP session; and
 - j) sending a second INVITE message from the service provider to the content provider storing the first program P1 for establishing a second leg of the first SIP session.
- [c4] 4. The method claimed in claim 3, wherein the service provider is connected to an

SIP functionality having a Parlay/SIP converter and an SIP server, and wherein the method comprises previous to step i) the steps of:

sending a Parlay/OSA RouteReq() message from a service application of the service provider to the Parlay/SIP converter, the Parlay/OSA RouteReq() message being indicative of a request for the establishment of the first leg of the first SIP session; and

upon receipt of the Parlay/OSA RouteReq() message, the Parlay/SIP converter converting the Parlay/OSA RouteReq() message into the first INVITE message; and the Parlay/SIP converter sending the first INVITE message to the SIP server;

wherein the step i) of sending the first INVITE message from the service provider to the SIP terminal includes sending the first INVITE message from the SIP server to the SIP terminal.

[c5] 5. The method claimed in claim 4, wherein the method comprises previous to step j) the steps of:

sending a Parlay/OSA SendInfoRequest() message from the service application to the Parlay/SIP converter, the Parlay/OSA SendInfoRequest() message being indicative of a request for the establishment of the second leg of the first SIP session; and

upon receipt of the Parlay/OSA SendInfoRequest() message, the Parlay/SIP converter converting the Parlay/OSA SendInfoRequest() message into the second INVITE message; and

the Parlay/SIP converter sending the second INVITE message to the SIP server; wherein the step j) of sending the second INVITE message from the service provider to the SIP terminal includes sending the second INVITE message from the SIP server to the SIP terminal.

[c6] 6. The method claimed in claim 1, wherein the step a) of sending a program request is performed over an HTTP (Hyper Text Transfer Protocol) link over the Internet connecting the SIP terminal and the service provider.

[c7] 7. The method claimed in claim 1, wherein the step d) of streaming the first program P1 comprises the step of:
streaming a program data of the first program P1 from the content provider to the

SIP terminal using a Real-Time Protocol (RTP) over the first SIP session.

[c8] 8. The method claimed in claim 2, wherein the step e) of releasing the first SIP session between the SIP terminal and the content provider storing the first program P1 is performed following a termination of the first program P1.

[c9] 9. The method claimed in claim 2, wherein the step e) of releasing the first SIP session between the SIP terminal and the content provider storing the first program P1 is performed responsive to a stop request message sent from the SIP terminal to the service provider for stopping the streaming of the first program P1.

[c10] 10. The method claimed in claim 2, wherein the step e) of releasing the first SIP session between the SIP terminal and the content provider storing the first program P1 is performed responsive to a skip request message sent from the SIP terminal to the service provider for skipping the streaming of the first program P1.

[c11] 11. A telecommunications network comprising:
an SIP terminal;
a program service provider connected to the SIP terminal through a communications interface;
a plurality of programs content providers connected to the service provider;
wherein the SIP terminal sends to the service provider a program request comprising a program list including a plurality of selected programs, the service provider determines a content provider storing a first program (P1) from the plurality of selected programs and establishes a first SIP session between the SIP terminal and the content provider, the content provider streaming the first program P1 to the SIP terminal over the first SIP session.

[c12] 12. The telecommunications network claimed in claim 11, wherein:
the service provider releases the first SIP session between the SIP terminal and the content provider storing the first program P1;
following the release of the first SIP session, the service provider determines a content provider storing a second program (P2) from the plurality of selected programs;
the service provider establishes a second SIP session between the SIP terminal and

the content provider storing the second program P2; and the content provider storing the second program P2 streams to the SIP terminal the second program P2 over the second SIP session.

[c13] 73. The telecommunications network claimed in claim 11, wherein:
the service provider sends a first INVITE message to the SIP terminal for establishing a first leg of the first SIP session; and
the service provider sending a second INVITE message to the content provider storing the first program P1 for establishing a second leg of the first SIP session.

[c14] 74. The telecommunications network claimed in claim 13, further comprising:
an SIP functionality having a Parlay/SIP converter and a SIP server, the SIP functionality being connected to the service provider;
wherein the service provider further includes a service application sending a Parlay/OSA RouteReq() message to the Parlay/SIP converter, the Parlay/OSA RouteReq() message being indicative of a request for the establishment of the first leg of the first SIP session, wherein upon receipt of the Parlay/OSA RouteReq() message, the Parlay/SIP converter converts the Parlay/OSA RouteReq() message into the first INVITE message, and the Parlay/SIP converter sends the first INVITE message to the SIP server, and wherein the first INVITE message is sent to the SIP terminal from the SIP server.

[c15] 75. The telecommunications network claimed in claim 14, wherein:
the service application sends a Parlay/OSA SendInfoRequest() message to the Parlay/SIP converter, the Parlay/OSA SendInfoRequest() message being indicative of a request for the establishment of the second leg of the first SIP session;
upon receipt of the Parlay/OSA SendInfoRequest() message, the Parlay/SIP converter converts the Parlay/OSA SendInfoRequest() message into the second INVITE message; and
the Parlay/SIP converter sends the second INVITE message to the SIP server;
wherein the SIP server sends the second INVITE message to the SIP terminal.

[c16] 76. The telecommunications network claimed in claim 11, further comprising:
an HTTP (Hyper Text Transfer Protocol) link over the Internet connecting the SIP terminal and the service provider, wherein the SIP terminal sends the program

request to the service provider over the HTTP link.

[c17] 17. The telecommunications network claimed in claim 11, wherein the content provider streams a program data of the first program P1 to the SIP terminal using a Real-Time Protocol (RTP) over the first SIP session.

[c18] 18. The telecommunications network claimed in claim 12, wherein releasing the first SIP session between the SIP terminal and the content provider storing the first program P1 is performed following a termination of the first program P1.

[c19] 19. The telecommunications network claimed in claim 12, wherein releasing the first SIP session between the SIP terminal and the content provider storing the first program P1 is performed responsive to a stop request message sent from the SIP terminal to the service provider for stopping the streaming of the first program P1.

[c20] 20. The telecommunications network claimed in claim 12, wherein the releasing the first SIP session between the SIP terminal and the content provider storing the first program P1 is performed responsive to a skip request message sent from the SIP terminal to the service provider for skipping the streaming of the first program P1.

[c21] 21. The telecommunications network claimed in claim 11, wherein the content provider storing the first program P1 comprises a Program Media Player for streaming a program data of the first selected program P1 to the terminal using a Real-Time Protocol (RTP) over the first SIP session, following the establishment of the first SIP session.

[c22] 22. A service provider for providing program-on-demand in a telecommunications network, the service provider comprising:
a web server for receiving a program request for a plurality of selected programs from an SIP terminal;
a service application for determining a content provider storing each program of the plurality of selected programs and for establishing an SIP communication session between each content provider storing at least one of the plurality of selected programs and the SIP terminal, the SIP communication session being used for streaming each program of the plurality of selected programs to the SIP

terminal from a each content provider.

- [c23] 23. The service provider claimed in claim 22, wherein the service application functions to issue Parlay/OSA messages for the establishment of the SIP communication session, and the service provider is further connected to:
a Parlay/SIP (Session Initiation Protocol) converter for converting the Parlay/OSA messages into SIP messages; and
a SIP server for handling an establishment of the SIP communication session.
- [c24] 24. The service provider claimed in claim 22, wherein the program request is received through an HTTP (Hyper Text Transfer Protocol) link over the Internet connection the terminal to the web server of the service provider.

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